Petr Stepanov

netrstepanov.com

Ph.D. graduate in physics with expertise in materials science, gamma spectroscopy, defect studies, and nuclear physics. Over 7 years of experience in data analysis, particle simulations and scientific software development.

Summary of Qualifications

- More than 7 years of experience in GUI desktop software development for data analysis and statistics (C++, ROOT, Qt, Python, Wolfram Mathematica).
- Solid background in Monte-Carlo particle simulations (Geant4) in high-energy physics (HEP) and photonics research.
- BASH scripting on High-Performance Computing (HPC) Linux environment.
- Hands-on experience with data acquisition setups and fast electronics (Hamamatsu, ORTEC, Canberra, Tektronix).
- Strong materials science skills. Defect characterization and porosity studies in bulk materials.

Work Experience

Research Collaborator (On-Site)

Thomas Jefferson National Laboratory (JLab), Newport News, VA.

Jul 2020 - Jan 2023

Postdoctoral Researcher (Remote)

Catholic University of America (CUA), Washington, DC.

Jul 2020 - Jan 2023

Research Assistant

Bowling Green State University (BGSU), Bowling Green, OH.

Aug 2014 - May 2020

Education

Bowling Green State University (BGSU) • OH, United States

Aug 2014 - May 2020

Ph.D. in Photochemical Sciences • GPA 3.423. <u>Dissertation</u>: Novel developments in positron spectroscopy (PAS).

Ohio Supercomputer Workshop · OH, USA

Jan 2017 - Feb 2017

Hands-on sessions in High Performance Computing Infrastructure (HPC, SSH, BASH, SLURM).

National Research Nuclear University (MEPhI) · Moscow, Russia

Sep 2004 - Feb 2011

B.S. and M.S. in Solid State Physics. Thesis: application of PAS for defect concentration studies in bulk materials.

Professional Networks

- Find examples of my code on GitHub (50+ repositories).
- Discover my professional contacts on LinkedIn (200+ connections).
- Skim through the list of my publications on Google Scholar (24 articles, 300+ citations).

Relevent Interests

- Hosting an open-source project for keyboard remapping on Linux 300+ stars on GitHub.
- Developed a RAMDisk plugin for Linux that provides 50% increase in source code indexing time.
- Created two shared libraries for the ROOT data analysis framework [1, 2].
- Right to repair follower. Collecting and repairing old phones and laptops.
- Volunteer mechanic and fabricator at a non-profit automotive shop in Oregon City, OR.